

## Designing Craters: Creating a Deep Impact

# Guidelines for Good Experiments

### STUDENT HANDOUT

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#### YOUR EXPERIMENTAL DESIGN IS COMPLETE IF:

1. You have clearly stated which factor you are testing.
2. In your experiment, you change only the factor that you are testing. All other factors remain constant.
3. You have a plan for measuring and recording (e.g., in a data chart/table) the factor you are testing.
4. You have a plan for measuring and recording (e.g., in a data chart/table) the diameter and depth of the crater and for describing and recording the shape of the crater.
5. You have a plan for measuring and recording (e.g., in a data chart/table) the factors that should remain constant, so that you or someone else could recreate the same conditions.
6. Your experiment is safe to conduct within the classroom.

#### DIRECTIONS

Use the table below (or create your own) to write down your group's experiment plan. Make sure that you cover the six guidelines above.

**Factor to be tested:**

**Factors to be kept constant:**

**Plan for measuring and recording factor that is tested:**

**Plan for measuring and recording diameter and depth of the crater:**

**Plan for describing and recording the shape of the crater:**

**Plan for measuring and recording the factors that remain constant:**

**Plan to ensure experiment is conducted safely:**